EA Form R 1/2001

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: **Eastgate Water and Sewer Association**
% Lee Wolfe
3920 McHugh Ln
Helena MT 59602-7442

2. Type of action: **Application for Beneficial Water Use Permit No. 30026328-41I**

3. Water source name: **Groundwater Well**

4. Location affected by action: **NWNENE, Sec 30, Twp 10N, Rge 2W, Lewis and Clark County**

5. Narrative summary of the proposed project, purpose, action to be taken, and objectives:

The applicant proposes to add well #7 to the Eastgate Village Water Users existing system. The new well is located in the NWNENE of Sec 30, Twp 10N, Rge 2W. The application is proposing 410 gpm up to 222 acre-feet for multiple domestic purposes from January 1 to December 31 of each year and 410 gpm up to 109 acre-feet for lawn and garden purposes from April 1 to October 31 of each year. This well is proposed to be manifold will the other Eastgate wells. The place of use is the Eastgate Village Subdivision located in the NW and W2 of the SW of Section 29, and the E2 of the SE of Section 30 all in Township 10 North, Range 2W, Lewis and Clark County.

Eastgate Village has a number of water supply wells, however growth within the area over the past decade has prompted the association to add wells to the existing system. Some of the wells in the system do not produce a reliable source of water. At full build-out the subdivision will have an estimated 610 homes. A letter sent in with the measurement records indicate at full build-out the number of lots in both phases will be 626. It is unclear what the correct number would be.

The new well is drilled to a depth of 595 feet. The applicant conducted a 72-hour aquifer test at a discharge greater than the requested amount. Well #7 was completed using 12-inch steel from the surface to a depth of 452 feet and 10-inch steel to a depth of 565 feet. A 10-inch wire wrapped screen with a slot size of 0.060 inches extends from 565 to 585 feet. The well was grouted with bentonite to a depth of 25 feet. The outside of the casing was continuously fed granular bentonite for an additional seal. The static water level was measured at 124 feet below the top of the casing.

Benefits to the applicant include a more reliable water source to provide for both redundancy in the public water supply and reliability in meeting system demand.

The DNRC shall issue a water use permit to the applicant if the criteria in 85-2-311, MCA are met.

Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

Montana Natural Heritage Program (MTNHP)
Bill Uthman – DNRC Hydrogeologist

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: **No significant adverse impact.**
The proposed project would not affect chronically dewatered streams as identified by DFWP. The water to be diverted is from groundwater.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: **No significant adverse impact.**
The proposed project would not affect water quality in perennial streams. The water to be diverted is from groundwater wells.

Groundwater - Assess if the proposed project impacts ground water quality or supply.
If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: **No significant adverse impact.**
The applicant has demonstrated that the water for the proposed project is physically and legally available according to DNRC evaluation procedures. The water system currently is required to submit reports to the Department yearly. The applicant acknowledges a potential stream depletion impact of 232 acre-feet per year to nearby Prickly Pear Creek. The applicant therefore proposes to mitigate potential impacts through augmentation.

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: **No significant adverse impact.**
Since the well is utilizing groundwater it would not impact any of the following: channel impacts, flow modifications, barriers, riparian areas, or dams. A licensed well driller

drilled the wells in November of 2005.The new well is drilled to a depth of 595 feet. The applicant conducted a 72-hour aquifer test at a discharge greater than the requested amount. Well #7 was completed using 12-inch steel from the surface to a depth of 452 feet and 10-inch steel to a depth of 565 feet. A 10-inch wire wrapped screen with a slot size of 0.060 inches extends from 565 to 585 feet. The well was grouted with bentonite to a depth of 25 feet. The outside of the casing was continuously fed granular bentonite for an additional seal. A submersible pump powered by a 100 hp motor will pump water to the existing 250,000 gallon storage tank via the existing transmission mains.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: **No significant adverse impact.**
According to the NTNHP there is only one species of special concern in area. It is a vascular plant the Atriplex truncate or Wedge-leaved Saltbush. The Saltbush if generally found in vernally moist, alkaline soil around ponds and along stream in the valleys. The species is not in the immediate project area boundaries. This is an existing highly developed subdivision in close proximity to existing infrastructure.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: **No functional wetlands have been identified.**

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: **There is no pond development involved in this proposed project**

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: **No significant adverse impact to soil quality, stability or moisture content. The proposed project is for an existing subdivision.**

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: **No significant adverse impact.**
The existing vegetative cover was disturbed during the drilling of the well. The water users association would be responsible for reclamation of the area around the well. The proposed project is for an existing subdivision.

AIR QUALITY - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: **No significant adverse impact.**
This project would have no adverse impact to air quality.

HISTORICAL AND ARCHEOLOGICAL SITES - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: **No significant adverse impact.**
This is an existing subdivision. Any impact to archeological or historical sites would have happened during the initial construction phase.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: **No additional impacts to environmental resources were identified.**

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: **No significant adverse impact.**
This is an existing subdivision.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: **No significant adverse impact.**
This is an existing subdivision.

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: **No significant adverse impact.**
This is an existing subdivision. Review of the project by the Department of Environmental Quality would ensure human health would not be impacted by the water.

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.
Yes ___ No **X**.

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

(a) Cultural uniqueness and diversity? **No significant adverse impact. This is a long-time existing subdivision.**

(b) Local and state tax base and tax revenues? **No significant adverse impact. This is a long-time existing subdivision.**

(c) Existing land uses? **No significant adverse impact. This is a long-time existing subdivision.**

(d) Quantity and distribution of employment? **No significant adverse impact. This is a long-time existing subdivision.**

(e) Distribution and density of population and housing? **No significant adverse impact. This is a long-time existing subdivision.**

(f) Demands for government services? **No significant adverse impact. This is a long-time existing subdivision.**

(g) Industrial and commercial activity? **No significant adverse impact. This is a long-time existing subdivision.**

(h) Utilities? **No significant adverse impact. This is a long-time existing subdivision.**

(i) Transportation? **No significant adverse impact. This is a long-time existing subdivision.**

(j) Safety? **No significant adverse impact. This is a long-time existing subdivision.**

(k) Other appropriate social and economic circumstances? **No significant adverse impact. This is a long-time existing subdivision.**

2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: **No secondary impacts have been identified at this time.**

Cumulative Impacts: **No cumulative impacts have been identified at this time.**

3. Describe any mitigation/stipulation measures:
The water right permit, if issued would be subject to all prior existing water rights in the source of supply.
The permit if issued is subject to §85-2-505, MCA, requiring a well be constructed so it will not allow water to be wasted or contaminate other water supplies or sources, and a flowing well must be capped or equipped so the flow of the water may be stopped when not being put to beneficial use. The applicant acknowledges a potential stream depletion impact of 232 acre-feet per year to

nearby Prickly Pear Creek. The applicant therefore proposes to mitigate potential impacts through augmentation. A change application is to be submitted for the augmentation.

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: **This is an existing subdivision that will have over 600 homes at full build-out depending on the water supplied by the Eastgate Water Users Association. It is anticipated that this well (well #7) along with well #5 will serve as the primary water source for the Eastgate Village Subdivision. It is imperative to provide an adequate water supply for the homeowners.**

PART III. Conclusion

1. Preferred Alternative: **Issue the permit as applied for by the applicant, or in some modified form considered reasonable.**

2. Comments and Responses: **There have no been any comments or responses at this time**

3. Finding:
   Yes ___ No __**X**__ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: **Based on a consideration of the criteria found in DNRC Administrative Rule 36.2.524, "Determining the Significance of Impacts," there is not a significant adverse impact. An EA is sufficient for this level of action.**

Name of person(s) responsible for preparation of EA:
Name: **Kathy Arndt**
Title: **Water Resources Specialist**
Date: **July 2, 2007**